

**ABSTRACT OF THE DISCLOSURE**

5 A sensory apparatus including a substrate including a plurality of sensors to obtain an analyte profile, the sensors including an ion-selective sensor capable of measuring ion content and a chlorine sensor capable of measuring chlorine content, is disclosed. A method of generating an analyte profile, including measuring, directly or indirectly, properties including free chlorine concentration, pH, calcium ion concentration, carbonate ion concentration, and bicarbonate ion concentration, concurrently on a contiguous sample, is also disclosed.